

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for transcoding an audio/video (A/V) stream, the method comprising:

dividing a compressed digital A/V stream into audio and video data;

transcoding the divided video data;

synchronizing the divided audio data with the transcoded video data by matching Presentation Time Stamps (PTSs) of the audio and video data; and

packetizing the synchronized audio and video data into a digital A/V stream,

wherein the step of matching includes assigning a new PTS value to a packet of the audio data by assigning a PTS value for the divided audio data based on a PTS value for the transcoded video data.

2. (Original) The method according to claim 1, wherein the transcoding comprises reducing a bit rate of the video data.

3. (Original) The method according to claim 2, wherein the bit rate of the video data is reduced by reducing at least one of a frame size, a frame quality and a frame rate of the video data.

4. (Original) The method according to claim 1, wherein the digital A/V stream is compressed based on an MPEG standard.

5. (Cancelled)

6. (Currently Amended) The method according to claim 1, wherein original PTSs of the video data before the video data is transcoded are used for the transcoded video data.

7-9. (Cancelled)

10. (Previously Presented) The method according to claim 1, further comprising:
temporarily storing the divided audio data before synchronizing the divided audio data with the transcoded video data.

11. (Previously Presented) The method according to claim 10, wherein a size of a buffer for temporarily storing the audio data is determined based on both a time required to transcode the video data and a bit rate of the audio data.

12. (Previously Presented) The method according to claim 1, further comprising:
recording the packetized digital A/V stream in a recording medium.

13. (Previously Presented) The method according to claim 1, further comprising:
transmitting the packetized digital A/V stream.

14. (Previously Presented) The method according to claim 1, further comprising:

receiving the compressed digital A/V stream via a digital broadcast or via an input through a multimedia player.

15. (Currently Amended) An apparatus for transcoding a digital audio/video (A/V) stream, the apparatus comprising:

a demultiplexer configured to divide a compressed digital A/V stream into audio and video data;

a buffer configured to temporarily store the divided audio data;

a transcoder configured to transcode the divided video data;

a synchronizer configured to synchronize the divided audio data with the transcoded video data by matching Presentation Time Stamps (PTSs) of the audio and video data by assigning a PTS value for the divided audio data based on a PTS value for the transcoded video data; and

a packetizer configured to packetize the synchronized audio and video data into a digital A/V stream.

16. (Previously Presented) The apparatus according to claim 15, wherein the transcoder is configured to reduce a bit rate of the video data by reducing at least one of a frame size, a frame quality and a frame rate of the video data.

17. (Previously Presented) The apparatus according to claim 15, wherein original PTSs of the video data before the video data is transcoded are arranged to synchronize the divided audio data with the transcoded video data.

18. (Currently Amended) The apparatus according to claim 15,
~~wherein new PTSs are used for the transcoded video data, and PTSs of the divided audio data are updated based on the new PTSs so as to synchronize the divided audio data with the transcoded video data, and~~

wherein the transcoder and synchronizer are adapted so that transcoding and the synchronizing are performed on a section-by-section basis, each section having continuous PTS values.

19. (Cancelled)

20. (Previously Presented) The apparatus according to claim 15, wherein a size of the buffer is set based on both a time required to transcode the video data and a bit rate of the audio data.

21. (Previously Presented) The apparatus according to claim 15, further comprising:
a digital broadcast receiver configured to receive the compressed digital A/V stream via a digital broadcast; and
a recorder configured to record the packetized digital A/V stream in a recording medium.

22. (Previously Presented) The apparatus according to claim 15, further comprising:

a transmitter configured to transmit the packetized digital A/V stream to a client computer through a communication network.